



Attorney Docket No. 20757USDIV6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Ward *et al.*

Appl. No. 09/730,525

Filed: December 5, 2000

For: Herbicide Tolerant Protox Genes  
Produced by DNA Shuffling

Art Unit: 1637

Examiner: K. Horlick

Atty Docket: 20757USDIV6

Commissioner for Patents  
Washington, D.C. 20231

**RECEIVED**

MAR 06 2003

**TECH CENTER 1600/2900**

TERMINAL DISCLAIMER

Sir:

Syngenta Investment Corporation, a Delaware corporation and the legal successor to Ciba-Geigy Corporation, Novartis Corporation, and Novartis Finance Corporation, is the assignee and owner of the entire interest in the above-identified application by virtue of an assignment to Ciba-Geigy Corporation that was recorded in the United States Patent and Trademark Office on January 18, 1996 at Reel/Frame 7804/0853; the Change of Name from Ciba-Geigy Corporation to Novartis Corporation recorded in the United States Patent and Trademark Office on October 13, 1998 (Reel 9507, Frames 0112-0113); the assignment from Novartis Corporation to Novartis Finance Corporation (copy attached hereto); the assignment from Novartis Finance Corporation to Syngenta Investment Corporation (copy attached hereto); the assignment for US Patent Application No. 09/102,419 filed June 22, 1998 from the inventors to Syngenta Investment Corporation (copies attached hereto); and the assignment from Novartis AG to Novartis Finance Corporation (copy attached).

Syngenta Investment Corporation hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the above-identified application which would extend beyond the expiration date of the full statutory term defined in 35 USC §154-156 and §173, as presently shortened by any terminal disclaimer, of any of the following prior patents: Patent No. 5,767,373 issued June 16, 1998; and Patent No. 5,939,602, issued August 17, 1999. Syngenta

Investment Corporation is also the assignee and owner of the entire interest in said Patent Nos. 5,767,373 and 5,939,602.

Syngenta Investment Corporation hereby agrees that any patent granted on the above-identified application shall be enforceable only for and during such period that it and prior Patent Nos. 5,767,373 and 5,939,602, are commonly owned. This agreement runs with any patent granted on the above-identified application and is binding upon the grantee, its successors or assigns.

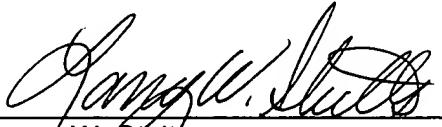
In making the above disclaimer, Syngenta Investment Corporation does not disclaim the terminal part of any patent granted on the above-identified application that would extend to the expiration date of the full statutory terms as defined in 35 USC §154-156 and §173 of prior Patent Nos. 5,767,373 and 5,939,602, as presently shortened by any terminal disclaimer, in the event that any of them later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR §1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the lie so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

The Commissioner is authorized to charge \$110.00 for payment of the terminal disclaimer fee under 37 C.F.R. §1.20(d) to Applicant's credit card. A Credit Card Payment Form is attached hereto.

Signed this 21st day of February 2001, by the undersigned attorney of record.

Syngenta Biotechnology Inc.  
Patent Department  
P.O. Box 12257  
3054 Cornwallis Road  
Research Triangle Park, NC 27709

  
Larry W. Stults

Attorney for Applicants  
Reg. No. 34,025  
Phone 919-541-8666

ASSIGNMENT

Whereas, Novartis AG, Lichtstrasse 35, 4002 Basel/BS, Switzerland, a corporation of Switzerland, is the assignee and legal owner of the entire right, title and interest in each of United States Patents 6,023,012, 6,084,155 and 6,308,458; and

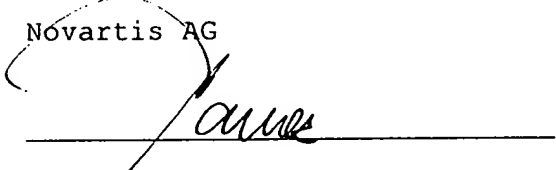
Whereas, Novartis AG wishes to assign its entire interest in each of United States Patents 6,023,012, 6,084,155 and 6,308,458 to Novartis Finance Corporation, 608 Fifth Avenue, New York, NY 10020, a corporation of New York, and said Novartis Finance Corporation wishes to acquire Novartis AG's interest in said patents.

Now, therefore, Novartis AG hereby assigns to Novartis Finance Corporation and its successors and assigns its entire right, title and interest in (a) each of United States Patents 6,023,012, 6,084,155 and 6,308,458, (b) any and all applications for reissues of said patents, (c) any and all reissues of said patents that may be issued and/or granted, (d) any and all applications for extensions of said patents (including reissue patents) and for reexamination certificates for said patents (including reissue patents) and (e) any and all extensions of said patents (including reissue patents) that may be issued and/or granted and reexamination certificates that may be issued for said patents (including reissue patents), including the right to sue, and to obtain damages, for past infringement, said right, title and interest conveyed herein by Novartis AG to Novartis Finance Corporation constituting the entire right, title and interest in said patents (including reissue patents), extensions and reexamination certificates.

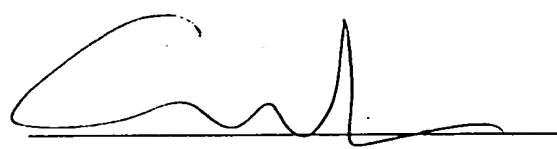
In witness whereof, Novartis AG has caused this Assignment to be signed by its duly authorized corporate signatories.

Signed this 22<sup>nd</sup> day of January 2003.

Novartis AG



Arthur Canonica  
Patent- and Trademark  
Administrator



Christoph Heid  
Patent- and Trademark  
Administrator

## ASSIGNMENT

Whereas, Novartis Corporation, 608 Fifth Avenue, New York, NY 10020, a corporation of New York, is the assignee and legal owner of the entire right, title and interest in each of United States Patents 5,767,373, 5,939,602, 6,177,245, 6,282,837, 6,288,306 and 6,307,129, abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and pending United States Patent Application Nos. 09/196,019 and 09/730,917;

Whereas, Novartis Corporation was formerly known as Ciba-Geigy Corporation, the change of name having been recorded in the Patent and Trademark Office on October 13, 1998 (Reel 9507, Frames 0112-0114); and

Whereas, in accordance with a resolution of the Board of Directors of Ciba-Geigy Corporation (now Novartis Corporation) made on December 20, 1996, Novartis Corporation wishes to assign its entire interest in each of United States Patents 5,767,373, 5,939,602, 6,177,245, 6,282,837, 6,288,306 and 6,307,129, abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and pending United States Patent Application Nos. 09/196,019 and 09/730,917 to Novartis Finance Corporation, 608 Fifth Avenue, New York, NY 10020, a corporation of New York, and said Novartis Finance Corporation wishes to acquire Novartis Corporation's interest in said patents and abandoned and pending patent applications.

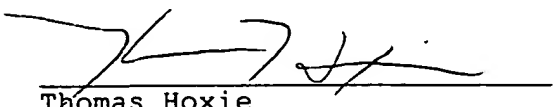
Now, therefore, Novartis Corporation hereby assigns to Novartis Finance Corporation and its successors and assigns its entire right, title and interest in (1) (a) each of United States Patents 5,767,373, 5,939,602, 6,177,245, 6,282,837, 6,288,306 and 6,307,129, (b) any and all applications for reissues of said patents, (c) any and all reissues of said patents that may be issued and/or granted, (d) any and all applications for extensions of said patents (including reissue patents) and for reexamination certificates for said patents (including reissue patents) and (e) any and all extensions of said patents (including reissue patents) that may be issued and/or granted and reexamination certificates that may be issued for said patents (including reissue patents), (2) abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and (3) (a) United States Patent Application Nos. 09/196,019 and 09/730,917, (b) any and all continuations and divisions of said application (including further continuations and divisions such as, but not limited to, continuations and divisions of continuations), (c) any and all patents that may be issued and/or granted on all of said applications, (d) any and all applications for reissues of said patents, (e) any and all reissues of said patents that may be issued and/or granted, (f) any and all applications for extensions of said patents (including reissue patents) and for reexamination certificates for said patents (including reissue patents) and (g) any and all extensions of said patents (including reissue patents) that may be issued and/or granted and reexamination certificates that may be issued for said patents (including reissue patents), including, in the case of all patents (including reissue patents) within the scopes of (1) and (3), the right to sue, and to obtain damages, for past infringement, said right, title and interest conveyed herein by Novartis Corporation to Novartis Finance

Corporation constituting the entire right, title and interest in said patents (including reissue patents), abandoned applications, pending application, extensions and reexamination certificates.

In witness whereof, Novartis Corporation has caused this Assignment to be signed by its duly authorized corporate officer.

Signed this 23<sup>rd</sup> day of January 2003.

Novartis Corporation



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Thomas Hoxie  
Vice-President

### ASSIGNMENT

Whereas, Novartis Finance Corporation, 608 Fifth Avenue, New York, NY 10020, a corporation of New York, is the assignee and legal owner of the entire right, title and interest in each of United States Patents 5,767,373, 5,939,602, 6,023,012, 6,084,155, 6,177,245, 6,282,837, 6,288,306, 6,307,129 and 6,308,458, abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and pending United States Patent Application Nos. 09/196,019 and 09/730,917; and

Whereas, in accordance with a resolution of its Board of Directors made on October 31, 2000, Novartis Finance Corporation wishes to assign its entire interest in each of United States Patents 5,767,373, 5,939,602, 6,023,012, 6,084,155, 6,177,245, 6,282,837, 6,288,306, 6,307,129 and 6,308,458, abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and pending United States Patent Application Nos. 09/196,019 and 09/730,917 to Syngenta Investment Corporation, 2200 Concord Pike, Wilmington, DE 19803, a corporation of Delaware, and said Syngenta Investment Corporation wishes to acquire Novartis Finance Corporation's interest in said patents and abandoned and pending patent applications.

Now, therefore, Novartis Finance Corporation hereby assigns to Syngenta Investment Corporation and its successors and assigns its entire right, title and interest in (1) (a) each of United States Patents 5,767,373, 5,939,602, 6,023,012, 6,084,155, 6,177,245, 6,282,837, 6,288,306, 6,307,129 and 6,308,458, (b) any and all applications ~~for~~ reissues of said patents, (c) any and all reissues of said patents that may be issued and/or granted, (d) any and all applications for extensions of said patents (including reissue patents) and for reexamination certificates for said patents (including reissue patents) and (e) any and all extensions of said patents (including reissue patents) that may be issued and/or granted and reexamination certificates that may be issued for said patents (including reissue patents), (2) abandoned United States Patent Application Nos. 08/261,198, 09/038,878, 09/059,164, 09/198,794 and 09/451,650 and (3) (a) United States Patent Application Nos. 09/196,019 and 09/730,917, (b) any and all continuations and divisions of said application (including further continuations and divisions such as, but not limited to, continuations and divisions of continuations), (c) any and all patents that may be issued and/or granted on all of said applications, (d) any and all applications for reissues of said patents, (e) any and all reissues of said patents that may be issued and/or granted, (f) any and all applications for extensions of said patents (including reissue patents) and for reexamination certificates for said patents (including reissue patents) and (g) any and all extensions of said patents (including reissue patents) that may be issued and/or granted and reexamination certificates that may be issued for said patents (including reissue patents), including, in the case of all patents (including reissue patents) within the scopes of (1) and (3), the right to sue, and to obtain damages, for past infringement, said right, title and interest conveyed herein by Novartis Finance Corporation to Syngenta Investment Corporation constituting the entire right, title and interest in said patents (including reissue patents), abandoned applications, pending application, extensions and reexamination certificates.

In witness whereof, Novartis Finance Corporation has caused this Assignment to be signed by its duly authorized corporate officer.

Signed this 29th day of January 2003.

Novartis Finance Corporation

Wayne P. Merkelson

Wayne P. Merkelson  
Vice-President

## ASSIGNMENT

We,

Eric R. Ward	residing at	3761 Bentley Drive Durham, North Carolina 27707
Sandra L. Volrath	residing at	4225 Pin Oak Drive Durham, North Carolina 27707
Marie A. Johnson	residing at	4528 Dawn Road Gibsonia, PA 15044
Sharon L. Potter	residing at	3054 Cornwallis Road Research Triangle Park, NC 27709

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign to **Syngenta Investment Corporation**, a Delaware corporation, having a place of business at 2200 Concord Pike, Wilmington, DE 19803, its successors, assigns and legal representatives, all our right, title and interest, which includes the right to and full benefit of such priorities as may now or hereafter be granted to us by local laws or by treaty, including any international convention for the protection of industrial property, in and for the United States and its territories and possessions in and to the invention entitled:

### HERBICIDE-TOLERANT PROTOPORPHYRINOGEN OXIDASE ("PROTOX") GENES

invented by us and described in the application for United States Letters Patent

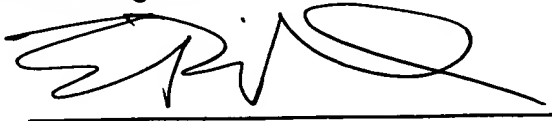
Application No. 09/102,419, filed on June 22, 1998

including (1) said application for United States Letters Patent and all continuations and divisions thereof (including further continuations and divisions such as, but not limited to, continuations of continuations and divisions of continuations), (2) all United States Letters Patent which may be issued and/or granted on all such applications, (3) all applications for reissues and extensions of and reexamination certificates for all such United States Letters Patent and (4) all reissues and extensions and reexamination certificates issued for all such United States Letters Patent, the said interest being the entire ownership of said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates to be held and enjoyed by the said Syngenta Investment Corporation and its successors and assigns to



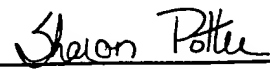
the full end of the terms to which said United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates may be granted and/or issued, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made;

And we hereby agree to sign and/or execute any further documents and/or instruments which may be necessary, lawful and proper in and/or for the filing and/or prosecution of said applications for United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates and/or the granting and/or issuance thereof and/or to otherwise secure title to said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates in said assignee.

Signed this 22<sup>nd</sup> day of January, 2003 by   
Eric R. Ward

Signed this 13<sup>th</sup> day of \_\_\_\_\_, 2003 by \_\_\_\_\_  
Sandra L. Volrath

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2003 by \_\_\_\_\_  
Marie A. Johnson

Signed this 13<sup>th</sup> day of February, 2003 by   
Sharon L. Potter

## ASSIGNMENT

We,

Eric R. Ward	residing at	3761 Bentley Drive Durham, North Carolina 27707
Sandra L. Volrath	residing at	4225 Pin Oak Drive Durham, North Carolina 27707
Marie A. Johnson	residing at	4528 Dawn Road Gibsonia, PA 15044
Sharon L. Potter	residing at	3054 Cornwallis Road Research Triangle Park, NC 27709

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign to **Syngenta Investment Corporation**, a Delaware corporation, having a place of business at 2200 Concord Pike, Wilmington, DE 19803, its successors, assigns and legal representatives, all our right, title and interest, which includes the right to and full benefit of such priorities as may now or hereafter be granted to us by local laws or by treaty, including any international convention for the protection of industrial property, in and for the United States and its territories and possessions in and to the invention entitled:

### HERBICIDE-TOLERANT PROTOPORPHYRINOGEN OXIDASE ("PROTOX") GENES

invented by us and described in the application for United States Letters Patent

Application No. 09/102,419, filed on June 22, 1998

including (1) said application for United States Letters Patent and all continuations and divisions thereof (including further continuations and divisions such as, but not limited to, continuations of continuations and divisions of continuations), (2) all United States Letters Patent which may be issued and/or granted on all such applications, (3) all applications for reissues and extensions of and reexamination certificates for all such United States Letters Patent and (4) all reissues and extensions and reexamination certificates issued for all such United States Letters Patent, the said interest being the entire ownership of said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates to be held and enjoyed by the said Syngenta Investment Corporation and its successors and assigns to

the full end of the terms to which said United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates may be granted and/or issued, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made;

And we hereby agree to sign and/or execute any further documents and/or instruments which may be necessary, lawful and proper in and/or for the filing and/or prosecution of said applications for United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates and/or the granting and/or issuance thereof and/or to otherwise secure title to said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates in said assignee.

Signed this        day of        , 2003    by    Eric R. Ward

Signed this 11<sup>th</sup> day of FEBRUARY, 2003    by    Sandra L. Volrath  
Sandra L. Volrath

Signed this        day of        , 2003    by    Marie A. Johnson

Signed this        day of        , 2003    by    Sharon L. Potter

## ASSIGNMENT

We,

Eric R. Ward	residing at	3761 Bentley Drive Durham, North Carolina 27707
Sandra L. Volrath	residing at	4225 Pin Oak Drive Durham, North Carolina 27707
Marie A. Johnson	residing at	4528 Dawn Road Gibsonia, PA 15044
Sharon L. Potter	residing at	3054 Cornwallis Road Research Triangle Park, NC 27709

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign to **Syngenta Investment Corporation**, a Delaware corporation, having a place of business at 2200 Concord Pike, Wilmington, DE 19803, its successors, assigns and legal representatives, all our right, title and interest, which includes the right to and full benefit of such priorities as may now or hereafter be granted to us by local laws or by treaty, including any international convention for the protection of industrial property, in and for the United States and its territories and possessions in and to the invention entitled:

### **HERBICIDE-TOLERANT PROTOPORPHYRINOGEN OXIDASE ("PROTOX") GENES**

invented by us and described in the application for United States Letters Patent

Application No. 09/102,419, filed on June 22, 1998

including (1) said application for United States Letters Patent and all continuations and divisions thereof (including further continuations and divisions such as, but not limited to, continuations of continuations and divisions of continuations), (2) all United States Letters Patent which may be issued and/or granted on all such applications, (3) all applications for reissues and extensions of and reexamination certificates for all such United States Letters Patent and (4) all reissues and extensions and reexamination certificates issued for all such United States Letters Patent, the said interest being the entire ownership of said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates to be held and enjoyed by the said Syngenta Investment Corporation and its successors and assigns to

the full end of the terms to which said United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates may be granted and/or issued, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made;

And we hereby agree to sign and/or execute any further documents and/or instruments which may be necessary, lawful and proper in and/or for the filing and/or prosecution of said applications for United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates and/or the granting and/or issuance thereof and/or to otherwise secure title to said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates in said assignee.

Signed this        day of        , 2003    by        \_\_\_\_\_  
Eric R. Ward

Signed this        day of        , 2003    by        \_\_\_\_\_  
Sandra L. Volrath

Signed this 22<sup>nd</sup> day of January , 2003    by        Marie A. Johnson  
Marie A. Johnson

Signed this        day of        , 2003    by        \_\_\_\_\_  
Sharon L. Potter